# ON A FEW NEW AND KNOWN MELOLONTHINE SCARABAEIDAE (COL.).

By Chas. Schaeffer, Brooklyn Museum, Brooklyn, New York.

#### Gronocarus n. gen.

Body above glabrous, shining. Head convex, separated from the clypeus by an arcuate suture; clypeus concave, rather strongly reflexed in front in the male, less strongly in the female. Antennae 9-jointed, the last three joints forming a moderately large lamellate club, which is longer than the funicle in the male and much shorter in the female. Labrum moderate, slightly rounded at apex. Mandibles triangular, subacute at apex. Ligula connate with the mentum, which latter is scarcely impressed at middle. Maxillary palpi moderately elongate, second and fourth joints elongate, fourth joint subparallel, third joint much shorter than the second or fourth. Labial palpi very short, last joint oval with apex subacute. Anterior coxae transverse, but rather prominent internally. Middle coxae narrowly separated, not prominent. Posterior coxae transverse, narrowly separated, not prominent. Anterior tibiae bidentate in both sexes. Middle and hind tibiae moderately stout, slightly dilated towards apex, the latter with two approximate free spurs. Middle and hind tarsi slender and longer than the tibiae in the male, hind tarsi of female shorter than the tibiae; claws simple, equal, slender and not toothed nor cleft, onychium and paronychia distinct. Ventral segments of abdomen six, not connate; spiracles of the fifth and sixth abdominal segments in the dorsal portion of the ventral segments, the seventh spiracle placed on the suture between the closely connate fifth ventral and propygidium the suture obliterated behind the spiracle.

Genotype, Gronocarus autumnalis new species.

#### Gronocarus autumnalis n. sp.

Males: Moderately elongate, shining, color brown, head more or less black, legs and antennae paler. Head convex behind, sparsely irregularly and moderately coarsely punctate; clypeal suture arcuate moderately deeply impressed from eye to eye; clypeus concave, sparsely and irregularly punctate as the head; margin broadly reflexed, arcuate, entire, not emarginate, the reflexed margin below coarsely punctate and with moderately long yellowish hairs behind but anteriorly smooth, eyes rather large and prominent and moderately coarsely faceted. Antennae 9-jointed, second joint

subglobose, third and fourth joints nearly equal, subparallel but short, fifth shorter, subtriangular, sixth short, strongly transverse and acutely produced internally, seventh to tenth joints, forming a three jointed club which is longer than the funicle and opaque not shining. Prothorax about twice as wide at base than long, sides from base gradually but very feebly narrowing to about basal two thirds thence more strongly towards apex; basal angles broadly rounded; anterior angles obtuse; lateral margins very feebly, finely crenate; anterior margin distinct not membraneous anteriorly. base not margined nor impressed, surface sparsely, finely and irregularly punctate; lateral margins and basal margins at middle and sides with moderately long, yellowish hairs. Elytra at base not wider than the prothorax at base, sides nearly parallel; sutural costa scarcely visible, discal costae absent; surface rather coarsely and densely punctate, the punctures much coarser than those of the prothorax; lateral margins with a single row of seta-like hairs. Body below clothed with moderately long yellowish hairs, rather sparsely placed on prosternum, abdomen and femora but very densely on meso- and metasternum tibiae along the median ridge and at sides furnished with long not closely placed, slender spines; tarsi at apex also with a few slender spines and a few shorter ones internally on the second and third joints. Ventral segments of abdomen finely but feebly punctate, penultimate segment rather coarsely punctate and very feebly lobed at middle of apex; last segment rather densely and coarsely punctate at middle, more sparsely at sides, at middle very feebly impressed. Pygidium sparsely punctate at apex but more closely at base. Length, from apex of prothorax to apex of elvtra: 10.25 mm.

Female: Differs from the above described male in being wingless, antennal joints and club shorter, the latter about as long as the funicle and not opaque but shining. The eyes are scarcely limited above and rather indistinct, but distinct and finely faceted below; the intermediate and posterior femora and tibiae are shorter and a little stouter; the hind tarsi are slightly shorter than the tibiae and the underside, including the meso- and metasternum, is very feebly pubescent. The claws are smaller slightly more dilated at base than those of the males and one or both are occasionally absent on one or both of the hind tarsi. Superficially the female looks somewhat like a small, pale specimen of Ligyrus gibbosus. Length from apex of prothorax to apex of elytra: 9.5 mm.

Alabama, Mobile, November 9 and 16.

This interesting new addition is one of the many good things turned up by Mr. H. P. Löding in whose collection are a pair of paratypes.

The new genus described above does not fit very well in any of the tribes occurring in North America but may be placed for the present with *Phobetus*. *Phobetus comatus* and *Gronocarus hiemalis* have the ventral segments of abdomen not connate, the anterior coxae transverse but prominent internally and the males of both species have almost the same, rather narrow and elongate hind tarsi. Besides the difference in the oral organs *Gronocarus* differs from *Phobetus* in having the anterior margin of prothorax not membranous, the claws of all the tarsi simple, not toothed and the clypeal suture entire, not interrupted at middle.

#### Phytalus vanalleri n. sp.

Form size and color of Phyllophaga ephilidia Say. Head scarcely darker in color, moderately coarsely not densely punctate, clypeus feebly emarginate. Prothorax about twice as wide as long, narrower at apex than base; lateral margin feebly crenulate; basal marginal line more or less distinct at sides, obliterated at middle; hind angles rectangular; surface shinning, moderately coarsely but not densely punctate. Scutellum rather sparsely punctate. Elytra scarcely wider at base than the prothorax, moderately coarsely and closely punctate; sutural costa moderately distinct, the discal and submarginal costae feeble. Pygidium, from a lateral view, rather strongly arcuate, somewhat coarsely but not densely punctate. Abdomen with moderate, not closely placed, punctures. Metasternum densely clothed with rather long hairs. Elevated portion of prosternum behind anterior coxae entire and arcuate at summit, not emarginate. Length: 18 mm.

Male: Antennal club slightly longer than the entire stem. Spurs of the hind tibiae free, moderately long, the outer slightly shorter than the inner; ventral segments of abdomen, one to three deeply impressed at middle, fourth triangularly arcuate at apex, fifth deeply linearly impressed at middle.

Mobile, Alabama (H. P. Löding); Tennessee (O. Dietz).

Type and paratype from Alabama, the latter in Mr. Löding's collection. The Tennessee specimen is smaller than those from Alabama but otherwise agrees in all characters with those from the type locality.

The claws in this species are unequally cleft, the upper portion is narrower and slightly shorter than the lower and has therefore

to be associated with *robustus*. It differs from *robustus* in narrower form, more shining and less closely punctured prothorax and the different form of the fourth ventral segment of abdomen, which in *robustus* is scarcely at all arcuate at apex.

This species looks very much like *Phyllophaga ephilidia* Say and without reference to the form of claws would be mistaken for that species. It is named after Mr. Van Aller, an enthusiastic obliging collector and good friend of Mr. Löding.

#### Phytalus robustus Horn.

This species was described by Dr. Horn from a single specimen from the Berlandiere collection made along the Rio Grande and which he thought may possibly have been collected on the Mexican side of the river at Matamoros. It was taken by the late Professor Snow at Brownsville, Texas.

The last paragraph, under Dr. Horn's description of *robustus*<sup>1</sup> does not belong to this species and is misleading. It is apparently referable to *cephalicus* with which the remarks of this paragraph perfectly agree. The localities, New Mexico and Arizona, in Leng's catalogue are therefore wrong; it should be Texas.

## Phytalus cavifrons Linell.

Linell described the apical tooth of the anterior tibiae of the female of this species as obliquely truncate and notched at apex. However this is not constant. One female has the apex of the anterior tooth distinctly emarginate on the left tibia but nearly rounded without trace of emargination on the other, in some specimens the apex is more or less distinctly truncate without emargination in others it is not truncate but rounded at apex.

### Polyphylla cavifrons Lec.

This species is recorded in Leng's catalogue from Mexico and doubtfully from Arizona. There is a specimen from Yuma, Arizona, in the Dietz collection which agrees very closely with Leconte's description. It is also recorded from Ehrenberg, Arizona, by Dr. Horn in his revision (1881) from a single specimen.

<sup>&</sup>lt;sup>1</sup> Trans. Am. Ent. Soc., Vol. XII, p. 121, lines 11 to 18.